

IN THE CLAIMS:

Kindly replace the claims of record with the following full set of claims

1. (Currently amended) An Interference canceller comprising:
an adaptive filter for modeling an interference, and
a spectral processor for processing the modeled interference together with
near end speech and the actual interference, ~~and characterized in that the interference~~
~~canceller further comprises~~ an interference model mismatch compensator coupled to the
adaptive filter for providing a mismatch signal for the spectral processor, said mismatch
signal being modeled based on a decay function independent of a speech input, showing a
~~speech independent decay.~~
2. (Currently amended) The Interference canceller according to claim [[2,]] 1
~~wherein characterized in that~~ the interference canceller comprises a step size estimator
coupled to the interference model mismatch compensator.
3. (Currently amended) The Interference canceller according to claim 1, wherein
~~characterized in that~~ the interference model mismatch compensator is arranged for
calculating an interference model mismatch estimate based on a minimum of the ratio of
a spectral measure of the near end speech and actual interference, and the modeled
interference of the adaptive filter.
4. (Currently amended) The Interference canceller according to claim 3, wherein
~~characterized in that~~ the minimum of said ratio is determined over a time span.
5. (Currently amended) The Interference canceller according to claim 4, wherein
~~characterized in that~~ the time span contains at least one pause in the speech.
6. (Currently amended) The Interference canceller according to claim 4, wherein
~~characterized in that~~ the time span lasts at least 4 to 5 seconds.

7. (Currently amended) The Interference canceller according to claim 3, wherein ~~characterized in that~~ the spectral measure is defined by ~~[[some]]~~ at least one positive function of the spectral power concerned, ~~[[such as]]~~ selected from the group consisting of: the spectral magnitude, the squared spectral magnitude, the power spectral density or the Mel-scale spectral density.

8. (Currently amended) The Interference canceller according to claim 1, wherein ~~characterized in that~~ the interference canceller is embodied as an echo canceller ~~[[and/]]~~ or a noise canceller.

9. (Currently amended) A System, ~~in particular~~ a communication system, ~~for example a hands-free communication device, such as a mobile telephone, a speech recognition system or a voice-controlled system,~~ which system is provided with an interference canceller ~~according to claim 1,~~ the interference canceller comprising:
 an adaptive filter for modeling an actual interference, and
 a spectral processor for processing the modeled interference together with near end speech and the actual interference, and ~~characterized in that the interference canceller further comprises~~ an interference model mismatch compensator coupled to the adaptive filter for providing a mismatch signal for the spectral processor, said mismatch signal being modeled based on a decay function independent of a speech input, showing a speech independent decay..

10. (Currently amended) A method ~~Method~~ for cancelling an interference, whereby an actual interference is modeled and the modeled interference, together with near end speech and the actual interference are processed, wherein ~~characterized in that~~ an interference model mismatch signal is used for modeling the actual interference, which mismatch signal being modeled based on a decay function independent of a speech input, showing a speech independent decay..

11. (Cancelled).

12. (New) The communication system of claim 9, wherein said communication system is selected from the group consisting of: a mobile telephone, a speech recognition system and a voice controlled system.